

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional) 4726US		Application Number To be assigned	
				Applicant Hilda E. Smith			
				Filing Date January 22, 2001		Group Art Unit To be assigned	

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
PAD	5,610,011	03/11/97	Smith et al.			
PAD	5,681,570	10/28/97	Yang et al.			
PAD	5,733,765	03/31/98	Mollet et al.			
PAD	5,786,184	07/28/98	Mollet et al.			
PAD	5,928,900	07/27/99	Masure et al.			
PAD	5,948,900	09/07/99	Yother et al.			
PAD	5,981,229	11/09/99	Masure et al.			

FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS		(Including Author, Title, Date, Pertinent Pages, Etc.)
PAD		PCT International Preliminary Examination Report, PCT/NL99/00460, dated October 27, 2000.
PAD		PCT International Search Report, PCT/NL99/00460, dated April 5, 2000, 6 pages.

EXAMINER PATRICIA A. DUFFY	DATE CONSIDERED 1/10/04
-----------------------------------	--------------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	2
-------	---	----	---

Complete if Known

Application Number	09/767,041
Filing Date	January 22, 2001
First Named Inventor	Hilda E. Smith
Group Art Unit	1645
Examiner Name	P. Duffy
Attorney Docket Number	2183-4726US

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

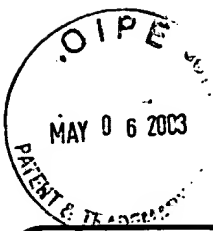
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
PAO		WO 92/16630	10-01-1992	Centraal Diergeneeskundig Instituut		
PAO		WO 92/21465	12-10-92 07-18-1995	Connaught Laboratories Limited	→ STS KOM EET'S ALL.	
PAO		WO 95/06732	03-09-1995	Rockefeller University		
PAO		WO 95/31548	11-23-1995	UAB Research Foundation		
		EP 0 750 043 A1	12-27-1996	Societe Des Produits		
		NOT CONSIDERED NOT IN ENGLISH		Nestle		

Examiner Signature	Patricia A. Duffy	Date Considered	1/11/04
-----------------------	-------------------	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.**



PTO/SB/08B(10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 2

Complete if Known

Application Number	09/767,041
Filing Date	January 22, 2001
First Named Inventor	Hilda E. Smith
Group Art Unit	1645
Examiner Name	P. Duffy
Attorney Docket Number	2183-47261US

RECEIVED

MAY 07 2003

TECH CENTER 1600/2800

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
PAD		BUSQUE et al., Immunization of pigs against Streptococcus suis serotype 2 infection using a live avirulent strain, Can J Vet Res., October 1997, pp. 275-79, Vol. 61, No. 4.	
PAD		CHARLAND et al., Streptococcus suis serotype 2 mutants deficient in capsular expression, Microbiology, February 1998, pp. 325-32, Vol. 144, No. 2.	
PAD		ELLIOTT et al., Streptococcal infection in young pigs. V. An immunogenic polysaccharide from Streptococcus suis type 2 with particular reference to vaccination against streptococcal meningitis in pigs, October 1980, pp. 275-85, Vol. 85, No. 2.	
PAD		KOLKMAN et al., Diversity of capsular polysaccharide synthesis gene clusters in Streptococcus pneumoniae, J. Biochem., May 1998, pp. 937-45, Vol. 123, No. 5.	
PAD		QUESSY et al., Immunization of mice against Streptococcus suis serotype 2 infections using a live avirulent strain, Can J. Vet Res., October 1994, pp. 299-301, Vol. 58, No. 4.	
PAD		ROBERTS et al., The biochemistry and genetics of capsular polysaccharide production in bacteria, Ann. Rev. Microbiol., 1996, pp. 285-315, Vol. 50.	
PAD		SMITH et al., Identification and characterization of the cps locus of Streptococcus suis serotype 2: the capsule protects against phagocytosis and is an important virulence factor, Infect Immun., April 1999, pp. 1750-56, Vol. 67, No. 4.	
PAD		SMITH et al., High efficiency transformation and gene inactivation in Streptococcus suis type 2, Microbiology, January 1995, pp. 181-88, Vol. 141.	
PAD		WATSON et al., Pneumococcal Virulence Factors and Host Immune Responses to Them, European Journal of Clinical Microbiology & Infectious Diseases, June 1995, pp. 479-90, Vol. 14, No. 6.	

Examiner
Signature

PATRICIA A. DUFFY

Date

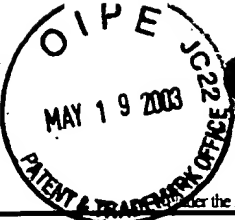
Considered

1/11/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

of

Complete if Known

Application Number	09/767,041
Filing Date	January 22, 2001
First Named Inventor	Hilda E. Smith
Group Art Unit	1645
Examiner Name	P. Duffy
Attorney Docket Number	2183-4726US

RECEIVED

MAY 22 2003

TECH CENTER 600/2900

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
PAO		WO 02/038597 A2	05-16-2002	IL-Lelystad, Instituut Voor Dierhouderijen Diergezondheid B.V.		
PAO		WO 00/05378	02-03-2000	Stichting Dienst Landbouwkundig Onderzoek		
PAO		*WO 96/21465	07-18-1996	Connaught Laboratories Limited		

Examiner
Signature

PATRICIA A-DUFFY

Date
Considered

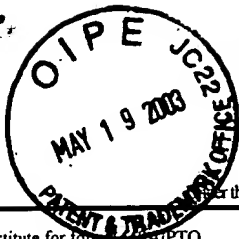
1/11/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

* WO 96/21465 was submitted with the Supplemental Information Disclosure Statement filed April 30, 2003; however, it was inadvertently listed as WO 92/21465. It is listed but a copy is not submitted herewith.



PTO/SB/08B(10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

of

Complete if Known

Application Number	09/767,041
Filing Date	January 22, 2001
First Named Inventor	Hilda E. Smith
Group Art Unit	1645
Examiner Name	P. Duffy
Attorney Docket Number	2183-47261US

RECEIVED

MAY 22 2003

TECH CENTER 1600/2900

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
PAD		SMITH et al., Cloning and nucleotide sequence of the gene encoding the 136-kilodalton surface protein (muramidase-released protein) of Streptococcus suis type 2, Infection and Immunity, 1992, pp. 2361-67, Vol. 60, No. 6.	
PAD		SMITH et al., Repeats in an extracellular protein of weakly pathogenic strains of Streptococcus suis type 2 are absent in pathogenic strains, Infection and Immunity, 1993, pp. 3318-26, Vol. 61, No. 8.	
PAD		SMITH et al., The cps locus of Streptococcus suis serotype 2: genetic determinant for the synthesis of sialic acid, Microbial Pathogenesis, 2000, pp. 127-34, Vol. 29, No. 2.	
PAD		SMITH et al., Selection of virulence-associated determinants of Streptococcus suis serotype 2 by in vivo complementation, Infection and Immunity, March 2001, pp. 1961-66, Vol. 69, No. 3.	
PAD		ALLGAIER et al., Relatedness of Streptococcus suis isolates of various serotypes and clinical backgrounds as evaluated by macrorestriction analysis and expression of potential virulence traits. Journal of Clinical Microbiology, 2001, pp. 445-453, Vol. 39, No. 2.	

Examiner
Signature

PATRICIA A. DUFFY

Date

Considered

1/11/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.